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A NEW FOSSIL MITRA FROM WEST FLORIDA, AND A NEW EOCENE ASTARTE.

BY T. H. ALDRICH.

MITRA (CHRYSAME) WALTONENSIS, n. sp. Pl. XI, fig. 1.

Shell rather solid, thick; apex scarcely pointed. Whorls six, three smooth, balance cancellated and shouldered, suture deep; varices near the aperture predominating over the spirals and appressed to the suture. Aperture with strong outer lip which is serrated on its outer edge and showing seven or eight strong lirations within; inner lip curved and covered with a strong enamel which spreads over part of the body whorl, two strong quadrangular folds on the lower central part and a pointed tooth near the posterior part of the aperture, base rounded, shell slightly umbilicated.

Height, 16 mm.; breadth, 9 mm.; length of aperture, 9 mm.

Locality: Shoal River bed, West Florida. Oligocene of Dall.

Remarks.—This is another Pacific Ocean form that adds to the evidence of a channel between the two oceans during the Tertiary period.

ASTARTE NEWTONENSIS, n. sp. Pl. XI, figs. 2, 3.

Shell small, rounded, nearly equilateral; beaks small, lunule rather long, the concentric ribs dying down at the edge, but the lines of growth run over to the hinge line and do the same on the escutcheon also. Valves moderately convex, sculptured with numerous small subequal ribs, inner margins crenulate, hinge as in the figure.

Height, 6 mm.; length, $7\frac{1}{2}$ mm.

Locality: From the "Burrstone," near Beulah P. O., Newton County, Miss.

Remarks.—This little species is strikingly similar to the species named ASTARTE OPULENTORA Dall, but that is from the Pliocene of Mexico.

NOTES ON THE CLASSIFICATION OF THE TORNATELLINIDÆ.

BY HENRY A. PILSBRY.

The *Tornatellinidæ* are a group of small or minute land snails found on the islands in and around the Pacific. An illustrated monograph has been prepared for the "Manual of Conchology," but as its publication will be delayed until the appearance of the *Achatinellidæ*, a brief sketch of the classification is here published in advance.

These shells have some resemblance to *Achatinellidæ* and *Partulidæ* in shape, but differ from both families by having an entering parietal lamella. In at least two species this is absent through degeneration in the adult stage, and in some others it is much reduced. Some species of the section *Lamellina* undergo remarkable changes from youth to maturity, the adult stage being secondarily simplified. Young individuals should always be collected with adults, when possible.

Key to Genera and Minor Divisions.

I. Shell rather *solid*, glossy, bright or dark colored or variegated; axis imperforate, but usually superfically rimate in the adult stage. Genus AURICULELLA Pfr.

II. Shell thin, light brown or corneous, not polished.

  a. Axis imperforate, slender, the columella more or less sinuous.

    b. Shell globose-ovate; columella armed with an angular or bilobed vertical callus or plate, truncate or excavated below the prominence.

Genus ELASMIAS n. gen.

      c. Spire of few (3 to $4\frac{1}{2}$) whorls; columellar callus in form of a vertical, angular or bilobed plate.

Section *Elasmias*.